

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-93. (Canceled)

94. (Currently Amended) A non-naturally occurring single chain Fv protein comprising:

i) a first polypeptide having ~~The protein of claim 77 wherein said single chain protein comprises~~ a G28-1 single chain Fv binding domain, said binding domain polypeptide comprising a heavy chain variable region wherein a serine is at position 11 in the first framework region of the heavy chain variable region;

ii) a second polypeptide comprising an altered wild type IgG1 immunoglobulin hinge region attached to said first polypeptide, wherein the wild type IgG1 hinge region comprises first, second and third cysteine residues and a proline, wherein the first cysteine is N-terminal to the second cysteine, the second cysteine is N-terminal to the third cysteine, and the third cysteine is N-terminal to the proline, and wherein in the altered hinge region said first and second cysteine residues are substituted with serine and said proline residue is substituted with serine; and

iii) a third polypeptide comprising an N-terminally truncated immunoglobulin heavy chain constant region polypeptide attached to the second polypeptide, wherein said heavy chain constant region comprises CH2 and CH3 domains from IgG1.

95. (Currently Amended) A non-naturally occurring single chain Fv protein comprising:

i) a first polypeptide having ~~The protein of claim 77 wherein said single chain protein comprises~~ a G28-1 single chain Fv binding domain, said binding domain

polypeptide comprising a heavy chain variable region wherein a serine is at position 11 in the first framework region of the heavy chain variable region;

ii) a second polypeptide comprising an altered wild type IgG1 immunoglobulin hinge region attached to said first polypeptide, wherein the wild type IgG1 hinge region comprises first, second and third cysteine residues and a proline, wherein the first cysteine is N-terminal to the second cysteine, the second cysteine is N-terminal to the third cysteine, and the third cysteine is N-terminal to the proline, and wherein in the altered hinge region, said second cysteine residue is substituted with serine and said proline residue is substituted with serine, and

iii) a third polypeptide comprising an N-terminally truncated immunoglobulin heavy chain constant region polypeptide attached to the second polypeptide, wherein said heavy chain constant region comprises CH2 and CH3 domains from IgG1.

96. (Currently Amended) A non-naturally occurring single chain Fv protein comprising:

i) a first polypeptide having ~~The protein of claim 77~~ wherein said single chain protein comprises a G28-1 single chain Fv binding domain, said binding domain polypeptide comprising a heavy chain variable region wherein a serine is at position 11 in the first framework region of the heavy chain variable region;

ii) a second polypeptide comprising an altered wild type IgG1 immunoglobulin hinge region attached to said first polypeptide, wherein the wild type IgG1 hinge region comprises first, second and third cysteine residues and a proline, wherein the first cysteine is N-terminal to the second cysteine, the second cysteine is N-terminal to the third cysteine, and the third cysteine is N-terminal to the proline, and wherein the altered hinge region said first and second cysteine residues are substituted with serine,

iii) a third polypeptide comprising an N-terminally truncated immunoglobulin heavy chain constant region polypeptide attached to the second polypeptide, said heavy chain constant region comprising CH2 and CH3 domains from IgG1.

97.-109. (Canceled)

110. (Currently Amended) A single chain protein comprising the amino acids sequence of construct G28₁₂-V₄L11S (SSC-P)-H-WCH2WCH321-493 as set out forth in SEQ ID NO: 326, 328, 330, 374, 376 or 378-329.

111.-112. (Canceled)